

**CDC LARUE INDUSTRIES, INC.; and** )  
**CHRISTY, INC.,** )  
) )  
**Plaintiffs,** )  
) )  
**v.** ) **Case No. 14-CV-0286-CVE-FHM**  
) )  
**BLACK & DECKER (U.S.) INC.,** )  
) )  
**Defendant.** )

This matter comes before the Court for an interpretation of two claim terms contained in United States Patent No. 7,082,640 (the '640 patent). In their amended complaint, plaintiffs CDC Larue Industries, Inc. (CDC) and Christy, Inc. allege that defendant has infringed and continues to infringe the '640 patent. Dkt. # 38, at 4. The parties have stipulated to the meaning of a number of claim terms. Dkt. # 42. However, the parties dispute the meaning of claim terms “ambient air” and “drawn.” Dkt. # 43, at 13. A hearing was held pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995 (en banc), *aff’d*, 517 U.S. 370 (1996)).

David McCutchen, inventor of the technology at issue,<sup>1</sup> applied for a patent on July 18, 2003. Dkt. # 44-2, at 95. The application described a vacuum that would “backflush” its filters by reversing the flow of air through them in order to remove dirt and debris from the outside of the filters. Id. at 97. The inventor distinguished his design from prior art by stating that his system did not require the use of “a force system other than the primary vacuum system”; where prior art used

<sup>1</sup> McCutchen is also one of the founders of CDC. Dkt. # 43, at 5.

a second motorized or pneumatic system, his invention used the primary vacuum system in combination with sequential valve openings to clean the filters. Id. More precisely, the application’s Claim 1 stated that the machine would backflush its filters by “sequentially operating said valves to switch said filters from connection to said vacuum source to connection to ambient air and permitting ambient air to be intermittently drawn through corresponding ones of said valves and said filters into said cannister.”<sup>2</sup> Id. at 111 (emphasis added). Claim 10 is similar. Id. at 113.

The United States Patent and Trademark Office (USPTO) rejected McCutchen’s application on January 10, 2005. Id. at 71. The examiner cited a preexisting patent, the Nelson patent, as anticipating McCutchen’s technology because it too used sequentially-operated valves and ambient air to backflush filters. Id. at 72. McCutchen argued that the Nelson patent was distinguishable from his invention because the Nelson patent required for its operation two separate centrifugal fans, along with separate duct systems and other structural components. Id. at 58-59.

On July 8, 2005 the USPTO again rejected McCutchen’s application. Id. at 41. The examiner did not cite Nelson but stated that another application, the Finigan application, rendered McCutchen’s invention unpatentable. Id. at 42. McCutchen responded by amending Claim 1 to state that his invention would backflush filters by “permitting ambient air to be drawn through corresponding ones of said valves and said filters which are connected to ambient air by said vacuum via corresponding ones of said valves and filters which are connected to said vacuum.” Id. at 30 (emphasis added). Claim 10 was likewise amended. Id. at 32. McCutchen argued that the

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<sup>2</sup> The term cannister can be spelled either “cannister” or “canister.” See MERRIAM WEBSTER’S COLLEGIATE DICTIONARY 166 (10th ed. 1993). The patent uses “cannister,” while the parties’ briefs use “canister.” Compare Dkt. # 43-1, at 2, with Dkt. # 43, at 6, and Dkt. # 44, at 10. To remain consistent with the patent, the Court will use “cannister,” except when quoting from the parties’ briefs.

Finigan application was distinguishable from his claims as amended because the Finigan application would cease all air flow to and from a partition containing a filter, allowing dust to fall away from the filter, and then blow a steady stream of air through the filter to further remove dust. Id. at 36. McCutchen's invention instead sucked a turbulent stream of air through the filter, without ever stopping the air flow, and his invention did not require partitions. Id. at 36-37. The USPTO thereafter issued the '640 patent in 2006. Dkt. # 43-1.

Plaintiff Christy, Inc. is the assignee of the '640 patent, and plaintiff CDC is a licensee. Dkt. # 43, at 5. In 2008, defendant approached CDC and began discussions with the stated aim of having CDC produce vacuums for defendant. Id. These discussions continued for more than a year before ending abruptly. Id. In 2012, defendant began selling a vacuum that plaintiffs claim infringes the '640 patent. Id. Plaintiffs have filed an amended complaint alleging that defendant has infringed and continues to infringe the '640 patent, in violation of 35 U.S.C. § 271. Dkt. # 38, at 4. According to defendant, its "accused vacuum cleaning machine backflushes the filters using forced air from its vacuum motor that is re-circulated into the filters, in a manner similar to machines that are prior art to the ['640 Patent]." Dkt. # 44, at 6. The Court held a Markman hearing on January 13, 2015, at which both parties presented argument.

#### Proposed Constructions of the Two Claim Terms

Plaintiffs' proposed constructions:

- ambient air: "the air surrounding the canister" (Dkt. # 43, at 15)
- drawn: "pulled" (Id. at 19)

Defendant's proposed constructions:

- ambient air: "air from the area surrounding the outside of the vacuum cleaning machine that has not been forced or compressed" (Dkt. # 44, at 13)
- drawn: "pulled in by negative pressure only" (Id. at 27)

## II.

The words of a claim are to be given their "ordinary and customary meaning," which is the "meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention . . . ." Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005); see also Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 111, 1116 (Fed. Cir. 2004); Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996).<sup>3</sup> "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words. In such circumstances, general purpose dictionaries may be helpful." Phillips, 415 F.3d at 1314. However, in cases where the intended meaning is not apparent, courts look to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean," Innova, 381 F.3d at 1116, including the patent specifications and the prosecution history. See ICU Med., Inc.

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<sup>3</sup> At the Markman hearing, the parties directed the Court's attention to the following cases: GE Lighting Solutions, LLC v. AgiLight, Inc., 750 F.3d 1304 (Fed. Cir. 2014); Grober v. Mako Products, Inc., 585 F.3d 1335 (Fed. Cir. 2013); Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1374 (Fed. Cir. 2008); Purdue Pharma L.P. v. Endo Pharm. Inc., 438 F.3d 1123, 1136 (Fed. Cir. 2006); Omega Engineering, Inc. v. Raytek Corp., 334 F.3d 1314 (Fed. Cir. 2003); Rheox, Inc. v. Entact, Inc., 276 F.3d 1319 (Fed. Cir. 2002); and Bell Atlantic Network Services, Inc. v. Covad Communications Group, 262 F.3d 1258 (Fed. Cir. 2001). The Court has reviewed each of these cases and has either cited to them or finds them to be in accordance with the cited precedent.

v. Alaris Med. Sys., Inc., 558 F.3d 1368, 1374 (Fed. Cir. 2009); Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history”) (quoting DeMarni Sports, Inc. v. Worth, 239 F.3d 1314, 1324 (Fed. Cir. 2001)).

Plaintiffs argue that “ambient air” and “drawn” are among the type of claim terms for which the ordinary meaning is appropriate. Plaintiffs cite a general dictionary to show that “ambient air” means “surrounding air.” Dkt. # 43, at 15 (citing WEBSTER’S NEW WORLD COLLEGE DICTIONARY 44 (5th ed. 2014)). Likewise, plaintiffs state that “drawn” simply means “pulled.” Dkt. # 43, at 19 (citing WEBSTER’S, supra, at 443). Other general dictionaries offer similar definitions. E.g., THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (5th ed. 2014) (defining “ambient” as “surrounding; encircling” and “draw” as “[t]o cause to move in a given direction or to a given position”). Defendant does not offer its own definitions or contest those provided by plaintiffs; defendant accepts them as a starting point. See Dkt. # 44, at 13, 27. However, defendant argues that McCutchen narrowed the plain and ordinary meaning of both contested terms in the patent application and prosecution history and, as a result, plaintiffs’ constructions arguably ignore the context in which the terms were used.

If the patentee unequivocally disclaimed a certain meaning during the patent approval process, the claim must be narrowed to exclude that meaning.<sup>4</sup> Chimie v. PPG Indus., Inc., 402 F.3d

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<sup>4</sup> The Federal Circuit refers to this as both “disclaimer” and “disavowal,” without distinguishing the terms. See, e.g., Phillips, 415 F.3d at 1316 (“[T]he specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor.”). Disclaimer will be used herein.

1371, 1384 (Fed. Cir. 2005). This ensures that claims are not construed one way in order to gain approval and another way against accused infringers. Id.; see also Computer Docking Station, 519 F.3d at 1374. However, “[f]or prosecution history to limit claim meaning, it must be clear and unmistakable that the patentee intended that limitation.” Aria Diagnostics, Inc. v. Sequenom, Inc., 726 F.3d 1296, 1302 (Fed. Cir. 2013) (citing Aventis Pharma S.A. v. Hospira, Inc., 675 F.3d 1324, 1330 (Fed. Cir. 2012)); see also GE Lighting, 750 F.3d at 1309 (“The standard[] for finding . . . disavowal [is] exacting”); Purdue Pharma, 438 F.3d at 1136. The Federal Circuit has said that “a claim term may be clearly redefined without an explicit statement of redefinition.” Bell Atl. Network, 262 F.3d at 1268. Defendant argues that McCutchen disclaimed the constructions plaintiffs now seek during the application and prosecution of the ’640 patent.

### **III.**

#### **A. “Ambient Air”**

Defendant argues that McCutchen disclaimed a meaning of “ambient air” other than defendant’s proposed construction. Dkt. # 44, at 13. As defendant notes, the parties “seemingly agree on one thing, namely that ‘ambient,’ . . . denotes ‘surrounding.’ However, the parties differ over what specifically is surrounded, and whether the inventor . . . disclaimed ‘ambient air’ to exclude air that has been ‘forced or compressed.’” Id. Defendant contends that McCutchen disclaimed the construction that plaintiffs seek during the application and prosecution history, both as to whether the air is forced or compressed and what is surrounded. Id. Plaintiffs argue that “ambient air” should be given its plain and ordinary meaning. Dkt. # 43, at 15.

### 1. Whether the Air is Forced or Compressed

Defendant argues that, in the patent application and prosecution history, McCutchen disclaimed a meaning of “ambient air” that includes air that is forced or compressed.<sup>5</sup> Dkt. # 44, at 14. Plaintiffs respond that no “clear and unmistakable” disclaimer occurred. Dkt. # 47, at 6.

According to defendant, the patent application “opens by denigrating forced or compressed ‘air’ and describes the use of ‘ambient air’ to be something so different as to be inventive.” Id. Defendant points to McCutchen’s discussion of prior art as further proof that “ambient air” did not include forced or compressed air, specifically citing a prior patent issued to McCutchen. Id. at 14-15. However, defendant’s argument seems to take McCutchen’s statements in the application out of context. The only mentions of forced or compressed air in the application are in the initial background section. See Dkt. # 44-2, at 97 (“Cleaning filtered vacuums is presently accomplished by shaker, percussion, forced air or compressed air systems.”); see also id. at 97-98 (“Another object of this invention is to provide a backflushed filter vacuum which does not require use of a secondary shaker, percussion, forced air, or compressed air system.”). It seems clear that McCutchen intended to distinguish his invention, which used a single system for vacuuming and backflushing, from prior art that used one system for vacuuming and a second system for backflushing. McCutchen did not state that the ambient air in his invention would not be forced or compressed; he merely stated that his invention did not use a separate forced air or compressed air system. The prior patent to McCutchen is not in conflict because, as defendant notes, that invention “used a blower B to forcibly

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<sup>5</sup> Based on the statements in defendant’s briefs and by counsel at the Markman hearing, the Court understands “forced” to mean the opposite of “pulled.” See, e.g. Dkt. # 44, at 29 (“The air flowing through a filter being backflushed in Finigan is being pulled in part, because the filter being backflushed is exposed to the low pressure inside chamber 16 of Finigan, but at the same time being ‘packed’ or forced also in part by positive pressure.”).

deliver air down through the filters.” Id. at 15. In other words, McCutchen’s prior patent was for a vacuum that used a second system to backflush the filters. The patent application, including the discussion of prior art, does not exhibit the “clear and unmistakable” language needed to disclaim forced or compressed air from the meaning of “ambient air.”

Defendant next points to McCutchen’s statements in his response to the USPTO’s first rejection of the application as evidence of disclaimer. In the response, McCutchen described how, although it used only one source of power, the Nelson patent still required two separate systems--two different fans, with associated structural components--to backflush the filters. Dkt. # 44-2, at 58-59. McCutchen’s invention, on the other hand, “solved the problem that Nelson set out to solve without the use of the second centrifugal fan and without the side-by-side and transverse duct limitations and associated controls that go with it.” Id. at 59. In support of its disclaimer argument, defendant relies on McCutchen’s statement that “Nelson would require Applicant’s valve ports . . . to be connected, not to ambient air, but to a second fan (or compressor or vacuum as in the prior art).” Id. at 61. Defendant argues that this statement shows that “air forced through a filter for backflushing is not ‘ambient air.’” Dkt. # 44, at 17. However, as plaintiffs argue, it seems that McCutchen intended to distinguish “ambient air” from air that is moved by a second power system. Dkt. # 47, at 7-8. The statement does not require that the air not be forced or compressed, as long as the process could be accomplished by the primary vacuum system. The statements in McCutchen’s first response do not meet the “clear and unmistakable” standard required for disclaimer.

Defendant argues that numerous statements made in McCutchen’s response to the USPTO’s second rejection, which focused on the Finigan application, demonstrate that “ambient air” cannot



be forced or compressed. The Finigan application, which required the filters to be separated inside the cannister, would temporarily shut off all air flow through a particular filter, and it would then use the primary fan to blow a “substantially steady stream of bag cleaning air” to the filter. Dkt. # 44-4, at 8. McCutchen amended his claims in response to the second rejection, clarifying that his invention “permit[s] ambient air to be drawn through corresponding ones of said valves and said filters which are connected to ambient air by said vacuum via corresponding ones of said valves and filters which are connected to said vacuum.” Dkt. # 44-2, at 30. In his remarks, McCutchen stated that, unlike his invention, the “the air [in the Finigan application] is being packed by the fan.” Id. at 36 (emphasis in original). He also stated that his invention was “not concerned with creating a non-turbulent atmosphere in which particles ‘settle’ or ‘migrate’ during pulse back.” Id. His invention “does not flip-flop between vacuuming and blowing. Applicant always uses the vacuum in a turbulent configuration retraining [sic] particles from filter to filter.”<sup>6</sup> Id. at 37 (emphasis in original). In describing how his amended claims were not foreclosed by the Finigan application, McCutchen said: “Applicant has amended [his claims] to clarify that the claimed pulse back path uses the vacuum sucking through the normally operating filters so that ambient air is also sucked by the vacuum through the pulse back operating filter. This is precisely what Finigen [sic] is trying to avoid . . . .” Id.

Defendant argues that, by his statements, McCutchen “was disclaiming Finigan’s use of clean air forced from the vacuum fan’s exhaust and re-circulated in a reverse direction back into one of the filters for backflushing from the scope of ‘ambient air.’” Dkt. # 44, at 18. It states that

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<sup>6</sup> Although both the Finigan application and McCutchen’s second response repeatedly used the terms “retraining” or “retraining,” at the Markman hearing plaintiffs’ counsel stated that the appropriate terms are “retraining” and “retraining.”

McCutchen's use of the word "packed" to describe the air in the Finigan application but not his own demonstrates that "ambient air" cannot be forced or compressed. Id. at 19. It is not clear what McCutchen meant by the term "packed," as that term is used only once. The paragraph in which the term is used discusses Finigan's use of the fan as both vacuum and blower as well as its need for a steady flow of air to the filter being backflushed. Id. at 36. In context, then, the term "packed" seems as closely related to the movement of the air as to the air itself. Even if the use of "packed" was intended as a disclaimer, it seems as likely that McCutchen was disclaiming air being delivered in a "steady stream," not simply all air that is forced or compressed. Given the ambiguity surrounding the term, McCutchen's use of "packed" does not clearly and unmistakably show that "ambient air" is not forced or compressed. Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1324 (Fed. Cir. 2003) ("We have, however, declined to apply the doctrine of prosecution disclaimer where the alleged disavowal of claim scope is ambiguous.").

Defendant also contends that the statement "ambient air is also sucked by the vacuum" shows that McCutchen was disclaiming forced air from the meaning of "ambient air." Id. Plaintiffs state that defendant is misinterpreting the differences that McCutchen pointed out in his response. McCutchen's statements, plaintiffs argue, were intended to show that Finigan required the filters to be divided into separate cells and sought to "avoid[] a turbulent atmosphere" during the backflushing process. Dkt. # 47, at 9. Thus, according to plaintiffs, McCutchen's statements had no effect on the meaning of "ambient air." Id. at 9-10. Although McCutchen's use of "sucked" affects the construction of "drawn," which the Court discusses in greater detail below, it does not affect the construction of "ambient air." In context, McCutchen's statement does not describe a particular meaning of "ambient air." Rather, it identifies the type of force being applied to the "ambient air."

To find that “ambient air” includes air that is not forced or compressed based on the use of “sucked” would conflate the meanings of “ambient air” and “drawn,” and the Federal Circuit has stated that “all claim terms are presumed to have meaning in a claim.” Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 111, 1119 (Fed. Cir. 2004). The use of “sucked” does not clearly and unmistakably require the meaning of “ambient air” to exclude air that is forced or compressed.

The patent and the prosecution history do not display a “clear and unmistakable” disclaimer of forced or compressed air from the meaning of “ambient air.”

## 2. What Is Surrounded

Defendant contends that, in the application and prosecution of the patent, McCutchen disclaimed from the definition of “ambient air” any air originating inside the machine. Dkt. # 44, at 21. Plaintiffs argue that the specifications, application, and prosecution history show not only that there is no disclaimer but also that “ambient air” includes air inside the machine. Dkt. # 47, at 8-10. The parties agree that “ambient air” does not include air inside the cannister, the lower chamber of the vacuum that houses the filters.

Both parties point to Figure 1, one of the drawings in the patent, to support their construction of “ambient air.” See Dkt. # 43-1, at 3. The detailed description of the drawing associates the number sixteen on the drawing with “ambient air.”<sup>7</sup> See id. at 10. This number appears in five places on Figure 1: once associated with the air entering the cannister through the intake port; once associated with the air being expelled from the vacuum motor; and three times with the valves

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<sup>7</sup> Defendant argues that the number sixteen is actually associated with the phrase “the source of ambient air.” Dkt. # 44, at 22. While the first reference to the number does follow that phrase, many other references do not. E.g. Dkt. # 44-2, at 102 (“Each of the valves 31, 32 and 33 is normally connected so that the vacuum source 15 draws ambient air 16 through the cannister inlet port 14 . . .”).

connecting the cannister and the vacuum head, the upper chamber of the machine that houses the valves and motor. See id. at 3. It is logical to assume that the “ambient air” entering the intake port comes from outside of the vacuum, as defendant argues. Dkt. # 44, at 21. However, Figure 1 does not “clearly and unmistakably” show that the four remaining citations to “ambient air” must refer to air outside the machine. Unlike the “ambient air” drawn through the intake port, there are no references to exterior ports or valves for the other references to “ambient air.” See Dkt. # 43-1, at 3. Likewise, the boundaries of the vacuum head are not included in Figure 1, although the boundaries of the cannister are clearly delineated.<sup>8</sup> Id. While defendant’s interpretation of Figure 1 could be correct, plaintiffs’ interpretation could be as well. Thus, Figure 1 does not provide a “clear and unmistakable” disclaimer with regard to the scope of “ambient air.”

Defendant further argues in favor of disclaimer using Figure 5, which displays in greater detail the valves connecting the cannister and the vacuum head. Dkt. # 44, at 11; see also Dkt. # 43-1, at 5. The drawing shows that valve 31b, previously designated as a valve open during backflushing, is connected to a duct. See Dkt. # 43-1, at 5. It is not clear from the drawing where that duct terminates, and the detailed description states only that “[t]he ambient air duct 36 extends from the ambient air port 31b into the source of ambient air 16.” Id. at 11. While this duct could, as defendant suggests, be connected to air outside the machine, Figure 5 does not foreclose alternate configurations. Thus, Figure 5 also does not provide “clear and unmistakable” evidence of disclaimer.

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<sup>8</sup> At the Markman hearing, defendant’s counsel agreed that Figure 1 is ambiguous as to the boundaries of the vacuum head.

Defendant also argues that McCutchen's statements during the prosecution history amount to disclaimer. Referring to McCutchen's response to the first rejection, defendant contends that McCutchen clearly equated "ambient air" with "air from the room to be cleaned." Dkt. # 44, at 23. Discussing the normal vacuuming process, McCutchen stated that "air is drawn from ambient air through the input port 14 so that the air from the room to be cleaned is circulated in the canister . . . ." Dkt. # 44-2, at 60. He later described the backflushing process: "Ambient air is also pulled through the valve ambient air port 31b and the filter by the vacuum 15 but in the opposite direction so as to clean the filter 21 . . . without the filter being directly connected to anything other than ambient air through the valve 31." Id. Defendant is correct that "ambient air" must include air from the room to be cleaned during vacuuming; if it did not, the machine would be useless. However, McCutchen's statements do not exclude the possibility that "ambient air" could come from inside--or both inside and outside--the vacuum head during backflushing. McCutchen's statements in his first response do not show disclaimer of the plain and ordinary meaning of "ambient air."

Defendant also argues that McCutchen's response to Finigan shows disclaimer. Because Finigan used air re-circulated inside the machine for backflushing and because McCutchen distinguished his invention from the Finigan application, defendant claims that McCutchen disclaimed the use of air inside the vacuum head from the meaning of "ambient air." Dkt. # 44, at 23. However, McCutchen distinguished his invention from Finigan based on differences unrelated to the source of the air used for backflushing, including the turbulence, direction, and continuity of the air flow used during backflushing and the configuration of the cannister. See Dkt. # 44-2, at 36-37. The fact that two inventions are distinguishable does not mean that they must be dissimilar in

every way. McCutchen's statements in his response to the USPTO's second rejection also do not clearly and unmistakably demonstrate disclaimer.

Disclaimer must be "clear and unmistakable," and this is a high standard. See GE Lighting Solutions, LLC v. AgiLight, Inc., 750 F.3d 1304, 1309 (Fed. Cir. 2014); Aria Diagnostics, Inc. v. Sequenom, Inc., 726 F.3d 1296, 1302 (Fed. Cir. 2013). Neither the patent application nor the prosecution history clearly and unmistakably demonstrates the disclaimer of "ambient air" for which defendant argues. The parties appear to agree that McCutchen has disclaimed from "ambient air" any air inside the cannister of the machine. However, there is not "clear and unmistakable" evidence that McCutchen limited the meaning of "ambient air" either to air surrounding the outside of the vacuum or air that is not forced or compressed. Thus, "ambient air" should be given its plain meaning, as modified by the only disclaimer on which the parties agree: "air surrounding the cannister." B. "Drawn"

Defendant also argues that McCutchen disclaimed the plain and ordinary meaning of "drawn" during the prosecution history of the '640 patent. Dkt. # 44, at 27. As with "ambient air," plaintiffs respond that "drawn" should be given its ordinary meaning. Dkt. # 43, at 19. The parties agree that the construction of "drawn" should include "pulled," and plaintiffs acknowledged at the Markman hearing that they would consider "sucked" to be synonymous with "pulled" and "drawn." The parties contest whether the construction should also include the limitation that the pulling be accomplished "by negative pressure only." Dkt. # 44, at 27.

Defendant argues that McCutchen disclaimed the plain meaning of "drawn" in the patent and in the prosecution history. Dkt. # 44, at 28. The patent and prosecution history repeatedly state that, during backflushing, the air is sucked or pulled into the cannister by the vacuum alone. See, e.g.,

Dkt. # 43-1, at 12 (noting that any combination of filters and valves would make the invention function, as long as “at least one combination will always provide suction from the vacuum source 15” (emphasis added)). Plaintiffs’ counsel reiterated this point at the Markman hearing, but it becomes particularly discernible in McCutchen’s response to the second rejection. Like McCutchen’s invention, Finigan used only the vacuum motor to power both the normal vacuum process and the backflushing process. See Dkt. # 44-4, at 4. Also like McCutchen’s invention, Finigan’s machine could vacuum and backflush simultaneously. Id. However, Finigan used the vacuum fan to “blow” air through a duct system into the filter being backflushed, and McCutchen distinguished his invention from Finigan in large part on the basis that his invention only pulled the air through the filter using the vacuum. See Dkt. # 44-2, at 37 (“Applicant does not flip-flop between vacuuming and blowing. Applicant always uses the vacuum . . . .” (emphasis in original)). In that same response, McCutchen amended his claims to state that “ambient air . . . [is] drawn through corresponding ones of said valves and said filters which are connected to ambient air by said vacuum via corresponding ones of said valves and filters which are connected to said vacuum.” Dkt. # 44-2, at 30 (emphasis added). His remarks regarding the amendments confirm that their purpose was “to clarify that the claimed pulse back path uses the vacuum sucking through the normally operating filters so that ambient air is also sucked by the vacuum through the pulse back operating filter.” Dkt. # 44-2, at 37 (emphasis added). Taking all of these statements into consideration, McCutchen clearly and unambiguously disclaimed a meaning of the word “drawn” that is inclusive, meaning one where the air being moved could be both “pulled” and “blown” simultaneously. See Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1374 (Fed. Cir. 2008) (“A patentee could [disclaim] . . . by clearly characterizing the invention in a way to try to overcome rejections

based on prior art.”). It is clear that McCutchen intended “drawn” to include only the pulling force of the vacuum as the moving force.

Plaintiffs provide no meaningful argument that McCutchen’s statements in his second response to the USPTO do not demonstrate disclaimer. Plaintiffs in fact discuss how McCutchen distinguished his invention from the Finigan application in part because his invention “does not flip-flop between vacuuming and blowing. . . . [It] always operates in a turbulent vacuum mode . . . .” Dkt. # 47, at 9. The standard for disclaimer is “exacting,” GE Lighting Solutions, LLC v. AgiLight, Inc., 750 F.3d 1304, 1309 (Fed. Cir. 2014), and it “must be clear and unmistakable that the patentee intended that limitation.” Aria Diagnostics, Inc. v. Sequenom, Inc., 726 F.3d 1296, 1302 (Fed. Cir. 2013) (citing Aventis Pharma S.A. v. Hospira, Inc., 675 F.3d 1324, 1330 (Fed. Cir. 2012)). The patent and the prosecution history show a clear and unmistakable disclaimer of the ordinary meaning of “drawn,” such that it does not simply mean “pulled.” Rather, “drawn” is exclusive of other forces, such that it means “pulled or sucked by the vacuum only.”<sup>9</sup>

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<sup>9</sup> The Court adopts “by the vacuum only” rather than “by negative pressure only,” as in defendant’s proposed construction, because McCutchen did not describe his invention, either in the patent or in the prosecution history, in terms of a pressure differential.

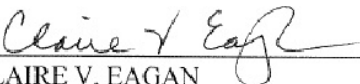


#### IV.

Applying the legal principles set forth above to the words and phrases identified by the parties for interpretation, the Court hereby interprets the two disputed claim terms in the '640 patent as follows:

1. The term “ambient air” should be interpreted as: “air surrounding the cannister.”
2. The term “drawn” should be interpreted as: “pulled or sucked by the vacuum only.”

**IT IS SO ORDERED** this 15th day of January, 2015.

  
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CLAIRE V. EAGAN  
UNITED STATES DISTRICT JUDGE